DEPARTMENT OF THE ARMY
DETROIT DISTRICT, CORPS OF ENGINEERS
477 MICHIGAN AVENUE
DETROIT MI 48226-2550

July 29, 2016

REPLY TO
ATTENTION OF:
Engineering & Technical Services
Regulatory Office
File Number LRE-2010-00823-255-A16

Peter Swenson
Chief, Wetlands and Watersheds Branch
U. S. Environmental Protection Agency (ww-16j)
77 W. Jackson Blvd
Chicago, Illinois 60604-3590

Dear Mr. Swenson:

Please refer to Michigan Department of Environmental Quality (MDEQ) Public Notice 2B5-QHB6-CZE8, dated May 17, 2016, regarding an application by Aquila Resources, Incorporated (Aquila), to discharge fill in 0.2 acres of wetland for haul road construction, and discharge riprap for outlet construction in the Menominee River west of Stephenson, Michigan (Sections 1, 11, and 12 of Township 35 North, Range 29 West; Sections 4-9 of Township 35 North, Range 28 West; and Section 32 of Township 36 North, Range 28, Menominee County). The purpose of the work is to conduct polymetallic mining.

Our comments are being submitted pursuant to Section 404(j) of the Clean Water Act, the regulations in 40 CFR §233, and further prescribed in the Memorandum of Agreement between the Michigan Department of Environmental Quality (MDEQ) and the U.S. Environmental Protection Agency (EPA). Our comments are based on our review of the MDEQ Public Notice, and other publicly available documents in the MDEQ's MiWaters database.

Complete Application:

The MDEQ Part 301 and Part 303 permit application lacks broad-scale plan views for portions of the project area located along the Menominee River. None of the permit application iterations appear to contain specific, final project plan views or cross sections for the proposed fill associated with the outlet pipe or haul road.

The wetland delineation should include the entire project area. Wetlands extending beyond the project area may need to be delineated if there are potential impacts from groundwater drawdown. Groundwater drawdown maps should be revised to show the entire affected area, and overlaid on a wetland delineation map that includes all potentially affected areas.

It is also unclear if the applicant included wetlands that extend outside the project area when calculating total wetland size, or if calculations were restricted to the portions

of the wetlands within the project area. For areas where impacts occur in wetlands crossing project area borders, the entire wetland acreage may need to be factored in to indirect impacts, including WL-A1, WL-2b, WL-B1, WL-40, and WL-41. Delineation should be completed for wetlands in the northeast portion of the project area, which were not delineated in the 2011 report. There also appears to be a forested wetland south of WL-5 that extends into the undelineated portion of the site. In addition, part of the 2011 wetland delineation was conducted from a vehicle, which is not a valid wetland delineation method, and it is unclear whether these areas were included in the 2015 subset of wetland boundaries reviewed by Stantech.

Some portions of larger wetlands shown on the wetland map appear to be mislabeled as distinct wetlands, for example WL-2c and WL-4a, as well as WL-B1 and WL-B2. Though crossed by River Road, wetlands WL-14, WL-14a, and WL-15b should be considered one contiguous wetland because, based on 33 CFR 328.2(c), man-made barriers (e.g., roads) are not sufficient to separate aquatic resources. WL-40 and WL-41, shown as not regulated, appear to be part of a much larger wetland system extending north of the project area. A review of aerial photos also shows what appears to be an unmapped linear water feature in Section 6, Township 35 North, Range 28 West. All waters within the project area should be mapped and potential impacts assessed.

Based on groundwater and geochemistry reports submitted following MDEQ's determination, several of the wetlands labeled isolated and not regulated, appear to be within the groundwater influence as it flows toward the Menominee River, and may not be isolated.

The proposed project would result in Shore Road terminating inside the project area. Regulated impacts from re-routing or a new road should be included in the permit application.

Project plan views identify that facility layouts are subject to change, which does not allow meaningful assessment of direct and indirect impacts. Maximum impact areas should be specified that encompass all foreseeable impacts.

Finally, multiple versions of the permit application and appendices complicate review. It would help if future submittals showed which of the previous portions still apply, and which are new or supplemental sections.

Water Quality:

Based on available information, there is inadequate support for the conclusion that water quality in the Menominee River would not be impacted. Constant drawdown and restricted release to the Menominee River may result in adverse impacts on water quality.

Aquatic Organisms:

Aquatic organisms in the Menominee River may be impacted by groundwater drawdown. Increased mercury inputs to the river may also impact aquatic organisms.

Adverse impacts on mussels would occur as a result of the work. A relocation plan for mussels in the Menominee River should include a thorough review of the species' life history, native range, and habitat requirements, as well as a survey of a proposed relocation site to ensure there are no invasive mussels present. The relocation site survey should also show that any necessary host species and other habitat requirements for the native mussels' survival are present.

Wetlands:

Sediment release due to erosion and stormwater may adversely affect wetlands. Specific erosion/sedimentation control measures, and identification of wetlands not directly impacted would reduce potential impacts.

Appendix E, the assessment of indirect wetland impacts, asserts that the loss of one third of the area of a surface water dependent watershed constitutes a significant loss for a watershed's wetlands, and that a loss of two thirds of watershed area would be significant for wetlands with both surface and sub-surface hydrology. Support for these thresholds is warranted.

A detailed monitoring plan for wetlands potentially affected by groundwater drawdowns is warranted, including specifics on adaptive measures. The current information does not reasonably present the merits and the efficacy of measures like discharge of treated wastewater, another cut-off wall, grout injection, or increased groundwater recharge or surface flow in a watershed.

Cultural Resources:

Results of Phase I and Phase II surveys show that consultation with the State Historic Preservation Office (SHPO) and further coordination with all potentially-affected Tribes is necessary. There are multiple sites within the project area labeled eligible, potentially eligible, and unevaluated for listing on the National Register of Historic Places. The applicant's assertion that the proposed project would likely not impact potentially eligible or eligible resources, requires the SHPO's input through the consultation process and in coordination with all potentially-affected Tribes, and interested parties. The Menominee Indian Tribe of Wisconsin's (MITW) ancestral use of the Menominee River area is well known, and the MITW may have information necessary to complete a review of cultural and archeological impacts. It does not appear that MITW or other affected Tribes' archeologists participated in field surveys. In its February 16, 2016 letter to the MDEQ, the MITW objected to the applicant's conclusion regarding impacts, and asserted that additional burial sites and Traditional Cultural Properties are likely present on the site. In the EIA, the applicant also states that the proposed oxide tailings and waste rock management facility site requires further survey and no disturbance will occur until a survey is completed and results are

acceptable. Complete information is warranted to evaluate impacts on cultural resources.

Mitigation for Wetland Impacts:

The mitigation plan does not adequately explore compensatory mitigation options. If impacts are unavoidable and mitigation is warranted, preservation is the last option behind restoration, enhancement, and creation of wetlands. The absence of mitigation banks and the length of time for restoration are not justification for preservation, and the threats to the proposed preservation area have not been substantiated. Threats from development, invasive species, hydrologic vulnerability, easements, and potential resource extraction are all considerations that should be thoroughly explored in site selection. Monitoring and maintenance plans are expected for mitigation plans.

A baseline on-site wetland delineation of the proposed mitigation site is expected for all mitigation proposals. The applicant's March 29, 2016 response includes a plant community map that appears to indicate mesic forest located within the wetlands and along the Menominee River shoreline is not included for preservation. If this is the case, the applicant should explain how this acreage would be managed or used, and describe potential impacts of such management/use on wetlands in the preservation area. Current disturbances onsite should also be thoroughly reviewed (existing roads, timber cuts, etc.)

Regardless of the final decision regarding mitigation, a conservation easement should protect mitigation acreage surface and subsurface areas in perpetuity from disturbance or alteration.

Overall, there is not enough information for the Corps to make conclusive determinations on the potential impacts of the project. Should you have any questions, please contact Jean Battle by E-Mail at Jean.M.Battle2@usace.army.mil, or by telephone at 906-228-2833. In all communications, please refer to File Number LRE-2010-00823-255-A16.

Sincerely,

Charles M. Simon
Chief, Regulatory Office
Engineering & Technical Services